

**SAF-B00-004**  
**Industrial Hygiene Sampling – Airborne**  
**FINAL DATA**

**ORIGINAL MUST BE**  
**SENT TO CLIENT**  
**SAMPLE MANAGEMENT**  
**KEEPS A COPY**

**COMPLETE DATA PACKAGE TO:**

Denise Pitts

X2-09

NB/11/29/04  
INITIAL/DATE

**COMMENTS: (PLEASE INCLUDE THE FOLLOWING ON THE FAX COVER SHEET)**

SDG

D00453

SAF-B00-004

Rad only   X   Chem only   Rad & Chem

X Complete

Partial

**314 Door 2**

Report Identification Number: 04I-3625-02  
 Subcontract Number: 0000X-B0-G0058-B-Mod#3  
 Name of Industrial Hygienist: Henry W. Ruby and Denise A. Pitts  
 Laboratory Identification Number: DCHM  
 SAF#: B00-004; B00-005  
 Payroll #: 73153

## Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
08-NOV-2004	J01WW1	04I33991	NTAM 7300M	G04BB026	GhostWipes
08-NOV-2004	J01WW2	04I33992	NTAM 7300M	G04BB026	GhostWipes
08-NOV-2004	J01WW3	04I33993	NTAM 7300M	G04BB026	GhostWipes
08-NOV-2004	J01WW4	04I33994	NTAM 7300M	G04BB026	GhostWipes
08-NOV-2004	J01WW5	04I33995	NTAM 7300M	G04BB026	GhostWipes
08-NOV-2004	J01WW6	04I33996	NTAM 7300M	G04BB026	GhostWipes

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Name: Michelle Paradise  
 Title: Chemist  
 Date: November 12, 2004



D00453



## Case Narrative Page

Page 2 of 7

Report Identification Number: 04I-3625-02  
Subcontract Number: OOOOX-BO-G0058-B-Mod#3  
Name of Industrial Hygienist: Henry W. Ruby and Denise A. Pitts  
Laboratory Identification Number: DCHM  
SAF#: B00-004; B00-005  
Payroll #: 73153

**General Set Information:** There are 12 samples in this batch. Set 04I-3625-01 had six samples and set 04I-3625-02 had six samples. The samples were analyzed for beryllium on Ghost Wipes by ICP. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

**Method Summary:** Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 10 mL of 1:1 (v/v) nitric acid. Samples were digested in a hot block at 110°C for 60 minutes. Samples were then diluted to 25 mL volume with ASTM Type II Water. Samples were shaken and delivered vials for ICP analysis.

**Sample Preparation:** All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

**Holding Times:** The holding times were met for both sample preparation and analysis.

**Instrument Calibration:** Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

**Initial and Continuing Calibration Verification Analysis:** Beryllium recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of  $\pm 10\%$ .

**Initial and Continuing Calibration Blank Analysis:** No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.02 ug/sample.

**Method Blank Analysis:** No beryllium was found in the media blank sample above the Contract Required Detection Limit (CRDL).

**Dilution(s):** None of the samples were diluted.

**Laboratory Control Sample and Duplicate Analysis:** One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS result is within control limits of  $\pm 20\%$ . The Relative Percent Difference (RPD) between the LCS and LCSD is within the control limit of 20%.

**Replicate Analysis:** One sample in this batch was replicated. The RPD between the sample and the replicate is within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

**Flagging Codes:**

U - Analyte not detected above the Method Detection Limit (MDL) of 0.005 ug/sample.

J - Analyte result is reported above the Method Detection Limit (MDL) of 0.005 ug/sample, but below the Contract Required Detection Limit (CRDL) of 0.02 ug/sample.

**Nonconformance/Corrective Action Report (NC/CAR):** None.

**Sample Calculation:** The final results are calculated by the following equation:

Final result for aqueous samples ( $\mu\text{g}/\text{sample}$ ) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ( $\mu\text{g}/\text{L}$ )

B = Concentration factor from sample preparation

=  $\frac{\text{Final Volume of Digestate (L)}}{\text{Sample}}$

Sample

C = Dilution performed at time of analysis

Example Calculation:  $(1 \mu\text{g}/\text{L}) \times (0.025 \text{ L}/\text{sample}) \times (1) = 0.025 \mu\text{g}/\text{sample}$

**Miscellaneous Comments:** None.



## Report Page

Page 4 of 7

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Laboratory Identification Number: DCHM  
SAF#: B00-004; B00-005  
Payroll #: 73153

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample	
J01WW1	04I33991	11 Nov 2004	0.044	
J01WW2	04I33992	11 Nov 2004	0.087	
J01WW3	04I33993	11 Nov 2004	0.096	
J01WW4	04I33994	11 Nov 2004	0.092	
J01WW5	04I33995	11 Nov 2004	<0.02	U
J01WW6	04I33996	11 Nov 2004	<0.02	U
Limit of Detection (LOD)			0.005	
Required Detection Limit (RDL)			0.02	

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



## QC Summary Page

Page 5 of 7

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SAF#: B00-004; B00-005  
Payroll #: 73153

Batch ID: G04BB026

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-225506-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
QC-225506-1	LCS	Beryllium	µg/sample	11.4	NA	10.0	114.	NA
QD-225506-1	LCSD	Beryllium	µg/sample	10.6	11.4	10.0	106.	7.74

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

$LCS, LCSD \text{ Percent Rec.} = (\text{Result} / \text{Target}) * 100.0$

$MS, MSD \text{ Percent Rec.} = ((\text{Result} - \text{Parent}) / \text{Target}) * 100.0$

$LCS, LCSD \text{ Relative Percent Diff.} = ( (|LCS - LCSD|) / ((LCS + LCSD)/2.0) ) * 100.$

$MS, MSD \text{ Relative Percent Diff.} = ( (|MS - MSD|) / ((MS + MSD)/2.0) ) * 100.$

$LD \text{ Relative Percent Diff.} = ( (|Parent - LD|) / ((Parent + LD)/2.0) ) * 100$

Page 1 of 2

~~CS3  
11-8-03~~

Web Page: [www.datachem.com](http://www.datachem.com)  
E-mail: [lab@datachem.com](mailto:lab@datachem.com)

ERC/INDUSTRIAL HYGIENE CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Relinquished By/Store:	DATE / TIME	Received By/Store:	DATE / TIME
Cynthia Williams Cynthia Williams	11-8-04 / 1110	locked vehicle Cynthia Williams Cynthia Williams	11-8-04 / 1110
Relinquished By/Store:	DATE / TIME	Received By/Store:	DATE / TIME
locked vehicle Cynthia Williams Cynthia Williams	11-8-04 / 1400	locked em #4 m0425/m0426 Kenneth R. Nelson	11-8-04 / 1402
Relinquished By/Store:	DATE / TIME	Received By/Store:	DATE / TIME
Express Express, from locked em #4 m0425/426 11/10/04 1411	11-8-04 / 1402	Federal Express Kevin Shuffert	11/10/04 1411
Relinquished By/Store:	DATE / TIME	Received By/Store:	DATE / TIME
Kenneth R. Nelson 11/10/04 1445	11-8-04 / 1402		11-11-04 1100
Relinquished By/Store:	DATE / TIME	Received By/Store:	DATE / TIME
FedEx	11-11-04 11AM		
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LABORATORY SECTION	Received By	Time	DATE / TIME

REVIEWED BY:

PRINT/SIGN NAME

DATE:

BH1-SH-202 (07/28/2004)

Page 2 of 2